

## RFRP-1 (T-19): sc-32375

### BACKGROUND

The human RFamide-related peptide gene, RFRP (also designated NPVF or C7orf9), is responsible for encoding three small neuropeptides designated RFRP-1 (NPSF), RFRP-2 and RFRP-3 (NPVF). The homologous gene in rodents encodes only two functional neuropeptide: RFRP-1 (NPSF) and RFRP-3 (NPVF). RFamide-related peptides constitute a large family of neuropeptides in a wide range of species that are known to play a role in neurotransmission, neuromodulation, cardioexcitation and control of muscle contraction. Neuropeptides RFRP-1 and RFRP-3 efficiently inhibit Forskolin-induced production of cAMP. RFRP-2, however, does not appear to have a similar inhibitory activity. RFamide-related peptides are secreted and abundantly expressed in retina. RFRP-1 and RFRP-3 are also widely distributed in fetal and adult brain, including the forebrain, hypothalamus, thalamus, midbrain, pons and medulla oblongata. RFRP-1 and the prolactin (PRL)-releasing peptide-31 (PrRP-31) may be involved in the stimulation of stress hormone secretion by either direct pituitary or indirect hypothalamic actions.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: NPVF (human) mapping to 7p15.3.

### SOURCE

RFRP-1 (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RFamide-related peptides precursor protein of human origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32375 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

RFRP-1 (T-19) is recommended for detection of RFamide-related peptides precursor protein and RFRP-1 active peptide of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RFRP-1 (T-19) is also recommended for detection of RFamide-related peptides precursor protein and RFRP-1 active peptide in additional species, including equine.

Suitable for use as control antibody for RFRP siRNA (h): sc-44797, RFRP shRNA Plasmid (h): sc-44797-SH and RFRP shRNA (h) Lentiviral Particles: sc-44797-V.

Molecular Weight of RFRP-1: 25 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.